

1.9 GHz Wireless Alert Badge

# K-SAB25

Before using this product, be sure to read "Safety Precautions" (pages 2 to 4).

Before operating this product, please read the instructions carefully and save this manual for future use.

# ***Safety precautions***

For U.S.A.

## **FCC CAUTION**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For U.S.A.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

For U.S.A. and Canada

This device complies with Part 15 of the FCC Rules and Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For Canada

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

For Canada

CAN ICES-003(A)/NMB-003(A)

**Radio Frequency (RF) Exposure Warning**

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. K-SAB25 has been tested and found to comply with FCC/ ISED radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the ISED radio frequency (RF) Exposure rules.

**Notice**

The FCC ID is located on the back of the unit.

**MEDICAL:**

Consult the manufacturer of any personal medical devices, such as pacemakers, to determine if they are adequately shielded from external RF (radio frequency) energy. (The unit operates in the frequency range of 1.92 GHz to 1.93 GHz, and the power output level is 10mW (max.).

**DANGER:**

This unit contains a built-in rechargeable battery.

- Do not throw this unit into a fire, subject it to heat, or charge, use, or leave it in locations subject to high temperatures.
- Do not heat this unit in a microwave or an oven.
- Do not puncture with nails, subject to impacts, or disassemble/modify this unit.
- Do not submerge this unit in water. Doing so may cause overheating, fire, or explosions to occur.
- Do not charge, use, or store this unit in hot places, such as under direct sunlight, inside closed cars during the summer, near open fires, stoves, etc.
- Continuing to use this unit with a deteriorated battery may cause battery fluid to leak.
- Battery fluid on your skin or clothing could result in skin inflammation or injury. Rinse with clean water and seek medical advice immediately.
- Battery fluid coming in contact with your eyes could result in loss of sight. In this case, do not rub your eyes. Rinse with clean water and seek medical advice immediately.

**WARNING:**

- 1) To prevent fire or electric shock hazard, do not expose this apparatus to rain or moisture.
- 2) The apparatus should not be exposed to dripping or splashing and no objects filled with liquids, such as vases, should be placed on the apparatus.

A lithium ion/polymer battery that is recyclable powers the product you have purchased.  
Please call 1-800-8-BATTERY for information on how to recycle this battery.



For U.S.A.

The model number and serial number of this product may be found on the surface of the unit.  
You should note the model number and serial number of this unit in the space provided and  
retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

# **Precautions**

**Turn off the power supply when inside an aircraft.**

The product might interfere with operational safety of the aircraft.

**Do not attempt to disassemble or short-circuit rechargeable batteries.**

An exploding battery or leaking battery fluid may result in fire, injury and burns.

**Avoid placing the product in unstable conditions.**

Failure to do so may cause injury.

**Stop operation immediately when something is wrong with the product.**

If this unit emits smoke, produces a burning odor, or expands excessively, continuing to use it may cause a fire. Immediately contact your dealer. If the unit is being charged, unplug the USB charging cable and contact your dealer.

**Do not swing the product around on its strap.**

The strap might come off, resulting in personal injury or damage to the product.

**Do not bring the product near medical equipment (do not bring it into operation rooms, ICUs, CCUs, etc.)**

The radio waves emitted from the product may interfere with the medical equipment causing it to malfunction and lead to accidents.

**Do not use near automatic doors, fire alarms, and other automatic controllers.**

The radio waves emitted from the product may interfere with the automatic controllers causing them to malfunction and lead to accidents.

**Do not pour liquid such as water or get it wet.**

It may lead to fire or electric shock. It may lead to overheating and bursts in the batteries. Immediately contact your dealer.

**Do not use this apparatus near water.**

**Do not attempt to disassemble or remodel the product.**

It may lead to fire or electric shock.

**Do not let foreign substances into the product.**

Water or metals entering the product may lead to fires or electric shocks. Immediately contact your dealer.

**Only use attachments/accessories specified by the manufacturer.**

## [Precautions for use]

- Operating temperature:  
5 °C - 35 °C {41 °F - 95 °F}  
When calculating the battery life, note that temperatures below 10 °C {50 °F} shorten the battery duration.
- Do not disassemble the product or touch internal parts. The battery cannot be replaced.
- Exercise care when using the product in high places. If it falls down, it may cause personal injury or suffer damage.
- Do not use or leave the battery in places where it will be exposed to high temperatures, such as in strong direct sunlight, in a sun-heated car, by the fire, or in front of a stove.
- Do not touch the USB port with dirty hands. Otherwise, poor contact or noise may result. If dirty, wipe off with a dry soft cloth.  
Clean the port regularly (approximately once a month) with ethanol. Do not use solvents, such as benzine or thinner, or a metal polish.
- Do not use a deteriorated battery. A battery in this condition may leak fluid, overheat and cause damage.
- Do not use the product with the wet hands in a place where it is directly exposed to water.
- Do not swing the product around on the neck strap. To prevent strangling, the closure of the strap provided for hanging the product around the neck is designed to give way under pressure. If swung around on the neck strap, the closure will open and the product will fly away, resulting in personal injury or damage to the product.
- Do not use this unit while it is in your back pocket. Sitting down with the unit in your back pocket may damage the unit, causing the battery to ignite, emit smoke, or cause an injury.
- This product is designed to be used indoors.  
This product is not operable outdoors. Do not expose this product to direct sunlight for hours and do not install the product near a heater or an air conditioner. Otherwise, it may cause deformation, discoloration and malfunction.  
Keep this product away from water and moisture.
- Use the product in a location where it is relatively shielded from noise produced by rotating machinery, transformers or the ignition system or automobiles.
- Do not use this unit near other communication devices. This may affect the unit's communication performance.
- Do not place the product on top of heat-generating equipment, such as powered amplifiers, video monitors or measuring instruments, and do not leave it in a closed car in hot summer. When storing the product, do so in a dry place.
- The product is high precision adjusted; exposing it to strong impact or dropping it on the floor may change its characteristics. Handle the product with due care. Do not expose the product to shock or impact as this will cause the audio output of the receiver to give off noise on impact.

### Product care

- Clean the power source with a dry cloth.
- Do not clean with volatile liquids such as benzine and thinner.
- When using a chemical cloth for cleaning, observe the cautions provided with that product.

### Product disposal

- This product must not be disassembled.  
Check and follow your state and local disposal regulations when disposing of this unit.

## **About trademarks**

- USB Type-C® is a registered trademark of USB Implementers Forum.

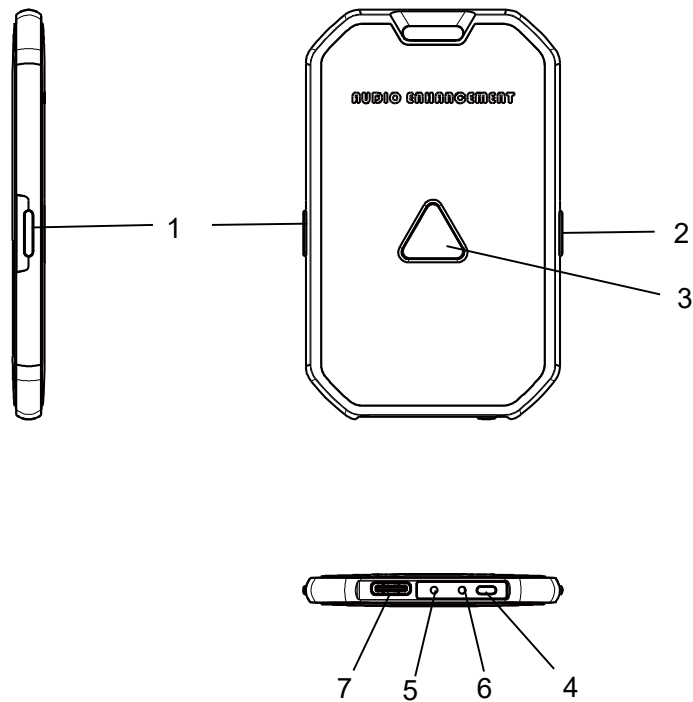
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# Major operating controls and their functions

## Note:

Before using for the first time, please charge the badge first.



Key functions change depending on the badge mode.

For details about switching modes, refer to the "Mode Selection" section.

- Alert Badge mode
  - Sends a safe alert or minor alert signal when a key is pressed.
- Visitor Badge mode
  - Sends location information signals regularly while the power is on.

### [1] Right SAFE Alert key

### [2] Left SAFE Alert key

[Alert badge mode]

Press the SAFE Alert keys (right and left) simultaneously for more than 2 seconds to send a safe alert signal.

To cancel the safe alert, press the [4] PWR/Cancel key for more than 2 seconds.

[Visitor badge mode]  
Disabled.

**Note:**

The SAFE Alert keys are labeled as "Right" and "Left" from the perspective of the user wearing the badge.

**[3] Minor Alert key**

[Alert badge mode]

Press the Minor Alert key for more than 2 seconds to send a minor alert signal.  
To cancel the minor alert, press the [4] PWR/Cancel key for more than 2 seconds.

[Visitor badge mode]  
Disabled.

**[4] Power/Cancel key**

[Alert badge mode]

<When pressed while turned off>

Press this key for more than 1 second to display the remaining battery level and the operation mode (badge mode) for 5 seconds, after which the badge will turn off again. (Refer to items [5] Battery indicator and [6] Status indicator.)

<When pressed while turned on>

Press for more than 2 seconds during a safe alert or a minor alert to cancel the status and turn off the unit.

[Visitor badge mode]

<When pressed while turned off>

Press this key for more than 1 second but less than 4 seconds to display the remaining battery level and the operation mode (badge mode) for 5 seconds, after which the badge will turn off again. (Refer to items [5] Battery indicator and [6] Status indicator.)

Press this key for more than 4 seconds on a badge set to Visitor Badge mode\* to turn on the unit in Visitor Badge mode.

<When pressed while turned on>

When turned on, all key operations are disabled.

To turn off a badge in Visitor Badge mode, connect it to a USB charging device.

\*Badges that were switched to Visitor Badge mode using the "Mode Selection" operation or that were turned off in Visitor Badge mode.

## [5] Battery indicator [BATT]

Battery level display (When checking battery level)

Battery level	Battery LED display
Full	Green
Low	Amber
Few	Red

Battery level display (When SAFE Alert or Minor Alert is ON)

Battery level	Battery LED display
Full	Green
Low	Amber
Few	Red

Battery level display (When unit is in Visitor badge mode)

Battery level	Battery LED display
Full	Light Off
Low	Light Off
Few	Red

Charging status display

Charging status	Battery LED display
Charging	Blinking (red) (blinks periodically by lighting up for 1 second and turning off for 2 seconds)
Charging completed	Red light
Error	Blinking (red) (blinks periodically by lighting up for 0.5 second and turning off for 0.5 seconds)
Over-discharged status	Red light (First minute)

## [6] Status indicator [Status]

Operation mode display

Current operation mode	Status LED display
Alert badge mode	Blinking (red) (5 seconds at 0.5-second intervals)
Visitor badge mode	Blinking (green) (5 seconds at 0.5-second intervals)

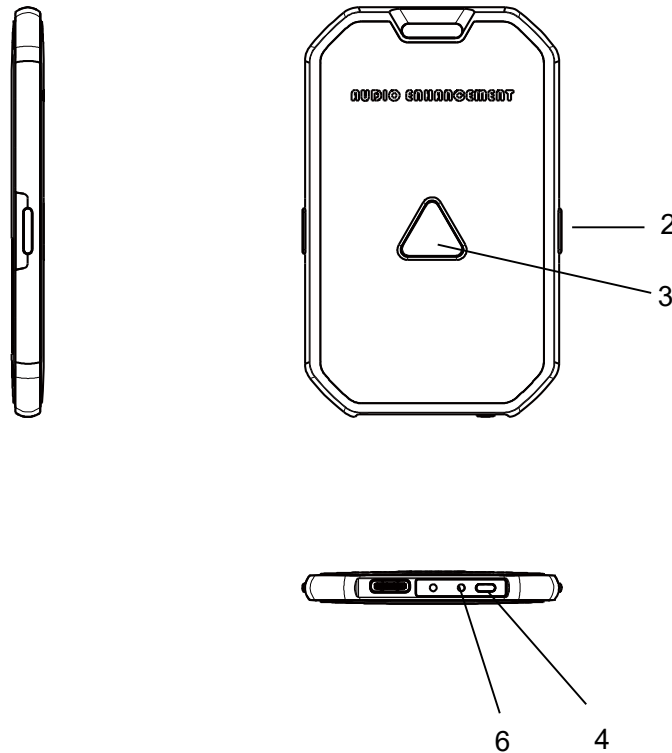
Operation status display

Operation status	Status LED display
SAFE Alert	Red light
Minor Alert	Amber light
Visitor Badge Power ON	Green light
Alert Cancel / Visitor Badge Power OFF	Light Off

## [7] USB Type-C® Port

Used to connect to the charger for charging the built-in battery.

## **Mode Selection** **(Alert badge mode/Visitor badge mode)**

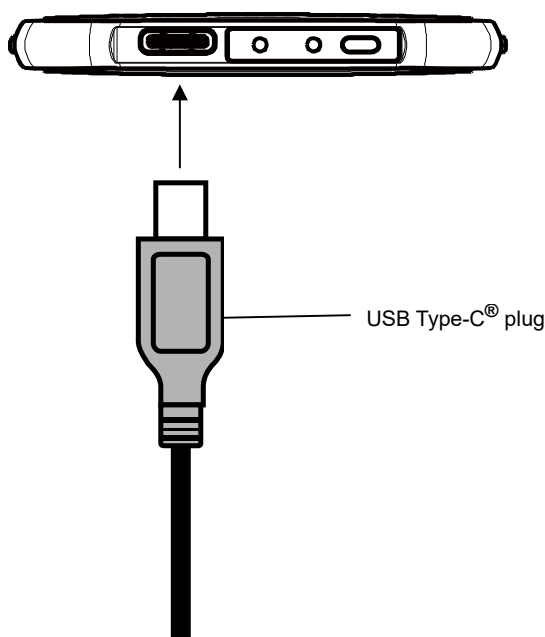


To switch modes, press the [2] Left SAFE Alert key, [4] PWR/Cancel key, and [3] Minor Alert key simultaneously for 3 seconds or more while the unit is turned off.

When switched to Alert Badge mode, the [6] Status indicator flashes red for 3 seconds at 0.5-second intervals.

When switched to Visitor Badge mode, the [6] Status indicator flashes green for 3 seconds at 0.5-second intervals.

## Charging a battery



### **1 Turn off the badge (Refer to item [4] PWR/Cancel key).**

For Visitor Badge mode, go to step 2.

### **2 Connect the charger's USB Type-C® plug to the badge's USB Type-C® port.**

When the badge is connected to the charger, the battery indicator displays the charging status as follows:

#### **Blinking (red):**

If the light alternates between on for 1 second and off for 2 seconds, the unit is charging.

If the battery is completely discharged, the battery indicator will be lit red for approximately the first minute.

#### **Blinking (red):**

If the light alternates between on for 0.5 second and off for 0.5 seconds, a charging error has occurred. (Refer to Troubleshooting)

**Light off:** The charging connector is not connected, or the battery is not installed.

#### **Important:**

- While connected to the charging connector, the safe alert and minor alert operations in Alert Badge mode are enabled; however, if the battery is over-discharged, key operations may not be recognized.

Key operations will be enabled once the battery is sufficiently charged for operation.

(In Visitor Badge mode, key operations are disabled during charging.)

#### **Caution:**

- If the charger remains connected after charging is complete, recharging begins to compensate for the unit's self-discharge losses.
- If the charging indicator is not lit when connected to the charger, check that the charger's

USB Type-C® plug is properly inserted into the USB Type-C® port and that the power cable is connected to the charger.

- Charging takes up to 4 hours (5V/500mA), but charging time may vary depending on usage conditions.
- Charging outside the temperature range stated in the product specifications may significantly increase charging time or prevent full charging.  
However, even within the temperature range, charging time may increase if the temperature of the badge is higher or lower than normal.
- The charger and badge may become slightly warm during charging.
- Do not recharge immediately after charging is complete.  
Doing so will shorten the battery's life.
- Even when it is not used for long periods, charge the battery at least once every 6 months.
- Be sure to read the charger's instruction manual.
- Charging the battery from a computer is not recommended.

# Trouble shooting

**Before asking for repairs, check the symptoms with the following table.**

Contact a dealer if the suggested remedies do not correct the problem or if the problem is not described below.

Symptom	Cause/solution
Battery level not displayed.	<ul style="list-style-type: none"> <li>• Has the battery run out?</li> </ul> >> Charge the battery.
Unit does not work even after charging.	<ul style="list-style-type: none"> <li>• Has the battery run out?</li> <li>• Has the unit been unused for a long time?</li> </ul> >> The battery cannot be charged due to over-discharge. Replace the unit.
Status LED not displaying safe alert or minor alert status in Alert Badge mode.	<ul style="list-style-type: none"> <li>• Has the battery run out?</li> </ul> >> Charge the battery.
	<ul style="list-style-type: none"> <li>• Is the unit in Visitor Badge mode?</li> </ul> >>Check by performing "Mode Selection". Blinking (red): Alert Badge mode Blinking (green): Visitor Badge mode
Cannot charge. (Battery indicator is off.)	<ul style="list-style-type: none"> <li>• Is the charger's USB Type-C® plug securely inserted into the USB Type-C® port?</li> </ul> >> Check the connection.
Cannot charge. (The battery indicator flashes red, repeatedly turning on for 0.5 seconds and turning off for 0.5 seconds.)	<ul style="list-style-type: none"> <li>• Has the battery deteriorated?</li> </ul> >>A deteriorated rechargeable battery may shorten the battery life or prevent the badge from turning on. Replace the unit.
It takes a long time to fully charge.	<ul style="list-style-type: none"> <li>• Are you charging from a computer?</li> </ul> >> Charge using a charger connected to a power outlet. Charging the battery from a computer is not recommended.
Charging time is short. (Charging seems to finish quickly.)	<ul style="list-style-type: none"> <li>• Are you charging when the battery is nearly fully charged?</li> </ul> >> Disconnect the USB cable and check the remaining battery level. If the battery level is low, reconnect the USB cable and charge again. If the charging time is short, even when the battery level is low, the battery may have deteriorated. Replace the unit.

## **Specifications**

Radio Standard	DECT
Frequency Range:	1,920.0-1,930.0 MHz
Coverage	30 m
Battery	Lithium Ion Battery (3.7 V/350 mAh) ※ Not exchangeable
Battery Cycle life	500 times, Recovery rate 80 %
Continuous operating time	6.5 hours (Brand new Full charged Battery condition)
Charging method	USB Type-C® port
Charge Time	4 hours (T.B.D)
Dimensions	2.14"(W) x 3.46"(H) x 0.27"(D) (T.B.D) 54.5 (W) x 88.0 (H) x 6.9 (D) [mm] (T.B.D)
Weight	0.075 lbs. (34 g) (T.B.D)
Temperature Range	5°C - +35°C {41 °F - 95 °F}
Humidity Range	10% - 90%
The Condition of Installation	Indoor use

Weights and dimensions indicated are approximate.

Specifications are subject to change without notice.